



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/635,612	08/07/2003	Hideaki Fukaya	047373-0132	9605
22428	7590	09/23/2004	EXAMINER	
FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007			BRASE, SANDRA L	
			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/635,612

Applicant(s)

FUKAYA, HIDEAKI

Examiner

Sandra L. Brase

Art Unit

2852

An

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5-11, 13-16 and 18-20 is/are rejected.
- 7) ☒ Claim(s) 3,4,12 and 17 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/7/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

¶

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 5, 6, 8-11, 13-16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al. (US 6,266,493) in view of Obata (US 6,285,843).
4. Farrell et al. (...493) disclose an image forming apparatus an method comprising: a plurality of color cartridges (40, 42 and 44) that supplies color toner; a monochrome cartridge (46) that supplies monochrome toner; an image formation unit configured to form an image on an image transferring member using at least one of the plurality of color toner and the monochrome toner, or a combination thereof corresponding to specifics of a job (col. 3, lines 4-25 and figure 3); and a processor electrically coupled to the image formation unit, where the processor is configured to determine whether the color cartridge contains insufficient color toner for printing an image according to a job (abstract; col. 4, lines 4-44; col. 5, line 40 – col. 6, line

Art Unit: 2852

34; col. 7, line 29-32; col. 8, line 51-55; and col. 10, lines 6-11). A user is notified when the processor determines that a color cartridge contains insufficient color toner for printing an image (col. 5, lines 63-66). However, Farrell et al. (...493) do not disclose the claimed processor queue configuration. Obata (...843) discloses an image forming apparatus and method including a processor that queues a second job, which is executable, before a first job, when the first job is determined not to be executable, where the first job is suspended and all following jobs, which are executable, are queued before the first, suspended, job and controls an image formation unit to form images in accordance with the queue (abstract; col. 1, lines 41-65; col. 11, lines 14-22 and col. 13, lines 10-15). The image forming apparatus is configured to perform a copying function, a printing function and a facsimile (col. 1, lines 7-10). It is obvious that if only jobs are left that are not executable, the image forming apparatus would pause until a job is received which is executable since all jobs that are not executable are suspended. It would have been obvious to one of ordinary skill in the art at the time of the invention to have the claimed processor queue configuration, as disclosed by Obata (...843), so as to prevent the image forming apparatus from halting. It would have also been obvious to one of ordinary skill in the art at the time of the invention for the image forming apparatus to include multiple functions, as disclosed by Obata (...843) since it is well known in the art for an image forming apparatus to perform more than one function.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Farrell et al. (US 6,266,493) in view of Obata (US 6,285,843) as applied to claim 1 above, and further in view of Miyashiro (US 6,314,250).

Art Unit: 2852

6. Farrell et al. (...493) in view of Obata (...843) disclose the features mentioned previously, but do not disclose the claimed sensor. Miyashiro (...250) discloses a sensor for sensing an amount of toner in a toner cartridge (abstract; and col. 7, line 15 – col. 8, line 54). It would have been obvious to one of ordinary skill in the art at the time of the invention to include the claimed sensor, as disclosed by Miyashiro (...250) since such a sensor is well known in the art to determine the amount of toner remaining in a cartridge with high accuracy.

Allowable Subject Matter

7. Claims 3, 4, 12 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Phillips (US 6,463,224) disclose an image forming apparatus that generates a signal to indicate that sufficient toner to perform imaging operations may not be available.

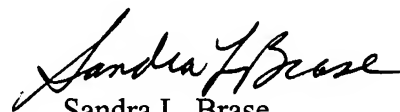
Hoene et al. (US 6,738,587) disclose an image forming apparatus that analyzes job parameters to determine whether or not any of the parameters are impermissible.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra L. Brase whose telephone number is 571-272-2131. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley, can be reached on 571-272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sandra L. Brase
Primary Examiner
Art Unit 2852

September 20, 2004